	SIFICATION OF SUBJECT MATTER C1 H01L21/301, B28D5/00, B23F	326/38, B23K101:40		
According t	o International Patent Classification (IPC) or to both na	ational classification and IPC		
B. FIELDS SEARCHED				
Minimum d	ocumentation searched (classification system followed	by classification symbols)		
Int.	Cl ⁷ H01L21/301, B28D5/00, B23F	(26/38, B23K101:40		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2003 Kokai Jitsuyo Shinan Koho 1971-2003 Jitsuyo Shinan Toroku Koho 1996-2003				
Electronic d	ata base consulted during the international search (nam	e of data base and, where practicable, sea	rch terms used)	
C. DOCU	MENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.	
Y	JP 2002-192370 A (Hamamatsu I		1-18	
	Kaisha),			
	10 July, 2002 (10.07.02),			
	Full text; all drawings & EP 1338371 A1			
Y	JP 2002-226796 A (Hitachi Ch	emical Co., Ltd.),	1-18	
]	14 August, 2002 (14.08.02),			
	Par. No. [0112]; Fig. 6 (Family: none)			
Y	JP 7-37840 A (NEC Corp.),		1-18	
	07 February, 1995 (07.02.95),	, `		
	Par. Nos. [0014] to [0019] (Family: none)			
	(Family, hone)			
× Furth	er documents are listed in the continuation of Box C.	See patent family annex.		
pposition of the comment		"T" later document published after the inte		
considered to be of particular relevance understand the principle or theory underlying the invention			erlying the invention	
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means combination being obvious to a person skilled in the art "&" document published prior to the international filing date but later "&" document member of the same patent family				
	e priority date claimed actual completion of the international search	Date of mailing of the international sear	ch report	
15 December, 2003 (15.12.03) 13 January, 2004 (13.01.04)				
Name and mailing address of the ISA/ Authorized officer				
Japanese Patent Office				
Facsimile No.		Telephone No.		

INTERNATIONAL SEARCH REPORT

Unternational application No.
PCT/JP03/1162

	citation of document, with indication, where appropriate of the relevant passages	Relevant to claim No.
Category*		
Y	JP 60-55640 A (Sanyo Electric Co., Ltd.), 30 March, 1985 (30.03.85), Page 2, upper right column, lines 1 to 18 (Family: none)	1-18
	JP 11-221684 A (Hamamatsu Photonics Kabushiki Kaisha), 17 August, 1999 (17.08.99), (Family: none)	1-18
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